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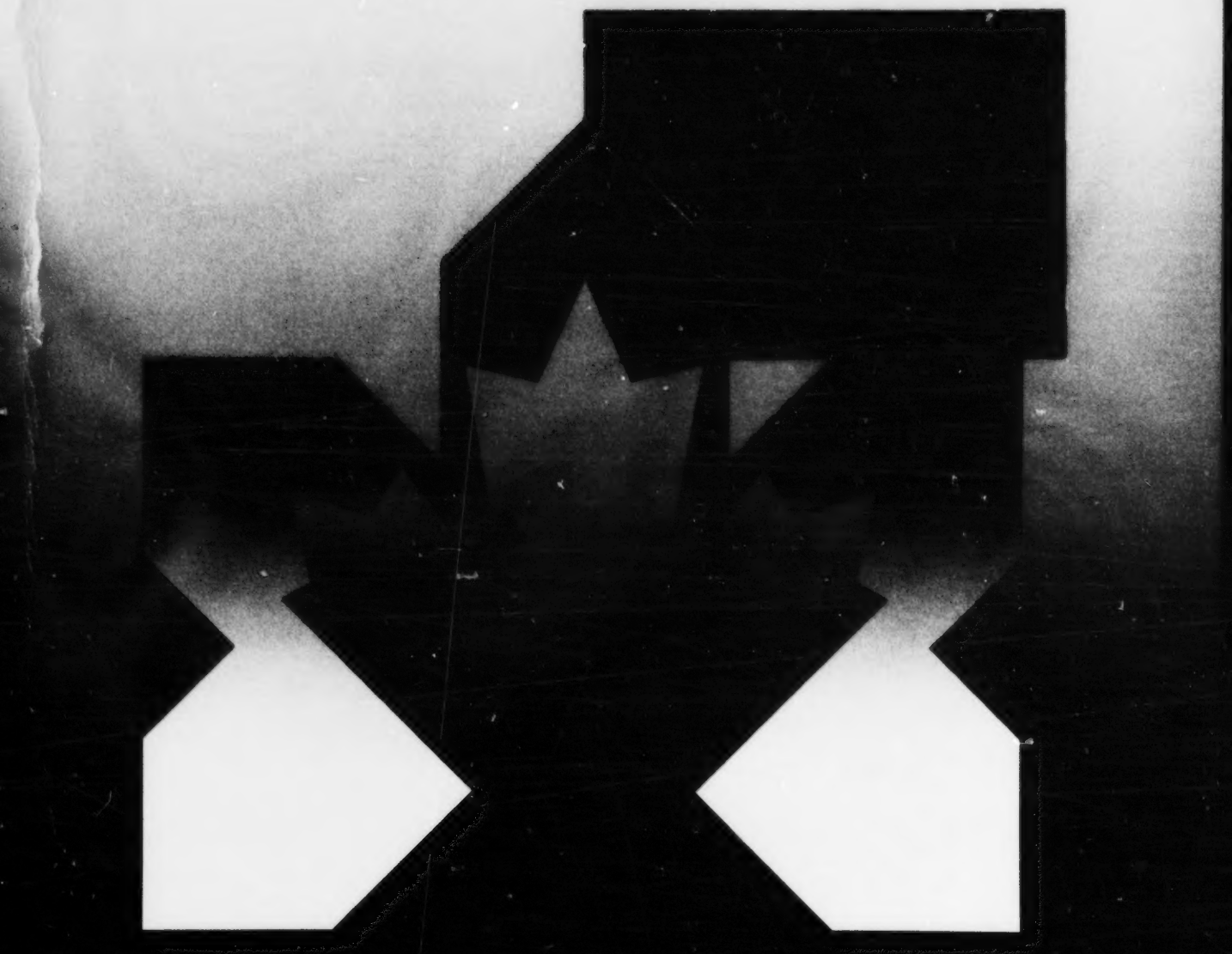

Canada

POLICY AND RESEARCH ISSUES IN SELF-HELP HOUSING PRODUCTION

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1.0 INTRODUCTION

This report has been prepared under contract to the Strategic Planning and Policy Development Division of CMHC. In addition to this report detailed commentary has been provided separately on a draft report *Self-Help Housing*, dated February, 1989.

The purpose of this report is to provide a commentary on the policy implications of self-help housing production, and to suggest directions for further research which might lead to future policy initiatives and, if so, the character of those initiatives.

The main section of this report addresses the policy implications of self-help production of new dwellings. However there is also some discussion of self-help renovation and repair activities and the implications of these. Additional sections of the report describe currently available data relating to self-help housing production and outlines some short to medium term research possibilities which would provide the information necessary to respond to the policy issues raised in the second section of this report.

2.0 ISSUES IN SELF-HELP PRODUCTION

In this section a number of issues are identified which offer opportunities for policy or which should be considered as part of the policy development process. In the CMHC report a number of forms were identified which self-help can take. This is a useful contribution and provides a working categorisation of different types of activity.

The discussion in this section is principally concerned with category A, that is, self-help by individuals on a one-off basis to improve their own accommodation (CMHC:2). The principal difference that this makes is that this report is much more concerned with the production of market housing through self-help than was the author of the draft CMHC report. However, since the focus is upon policy, social housing issues are also addressed.

2.1 MARKET HOUSING ISSUES

Most recent estimates show self-help production to account for up to 80% of current output in rural housing markets in Atlantic Canada and about 50% of total housing production for the region. It is also predicted to be important in Saskatchewan, British Columbia and

Quebec and probably in selected areas of the remaining provinces. Nationally, self-help production appears to account for about 14% of the total value of new residential construction[1].

Almost all current self-help output is market housing, the exception being production under government programs described in the Appendices to the CMHC draft report. It is important to recognise that these estimates are based upon case studies and indications from other sources such as residential construction statistics from Statistics Canada or general household surveys. **It would be very useful to be able to obtain more direct estimates of self-help activity, and particularly of renovation and repair activities** at an early stage in the consideration of the policy opportunities presented by self-help.

The principal purpose would be to determine the level and location of self-help housing production in order to establish the priority that this sector should receive.

At the same time **it would be useful to be able to predict the determinants and characteristics of self-help production**. Currently this is only possible for the areas covered by the case studies - and while these have provided some very useful insights, they have also shown us that it is not yet possible to generalise self-help production.

If significant levels of self-help activity are confirmed then there are a number of considerations which can currently be identified which should be addressed from the perspective of self-help as market housing.

The first of these is that if self-help is an important element of housing production, then it would be desirable to determine the labor and material requirements of self-help. It is very possible that they are different from industry production since self-help is assumed to be less efficient. However the important point is that even if they are similar, then **self-help is an important factor in estimating the employment and income gains of housing initiatives**.

Moreover, if, as it appears, the triggers for self-help are different from industry production (Rowe 1989), then **the employment and**

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[1] These estimates are from Rowe (forthcoming:Chapter 3)

income impacts of housing policies may be affected by the level of self-help production. Further, since some markets have much higher levels of self-help production than others, then the location of employment and income impacts will vary.

Associated with these considerations is the impact that self-help production has upon provincial and national economic accounts including sectoral accounts. It also affects the utility of forecasts of housing starts which are used by the residential construction and financing industry. In particular, the residential construction industry may be unrealistically optimistic of market opportunities in markets where self-help production provides a considerable portion of the forecasted output. This optimism can lead to the misallocation of resources.

The policy implication of all of this is that the self-help sector may not respond to the same stimuli as the residential construction industry, but may generate at least as much employment and income as does the industry. In addition, the benefits of production may be realised more locally in comparison to industry production.

It may be that were it not for self-help production social housing requirements would be much larger. For example, many lower income households obtain improved housing through the production of new dwellings or the renovation of inexpensive older dwellings through self-help. Thus **in order to avoid unnecessary future increases in social housing requirements it is desirable to understand self-help production so that at least the current level of production can be maintained.** However, until this understanding is more complete it is still possible to undertake information and other low cost and unobtrusive initiatives which are designed to assist current self-helpers and which are not costly to government.

In summary, we are now in a position to be able to say that self-help is a principal source of new accommodation, and probably renovation and repair, in the Atlantic region. There are also indications that it is an important source of activity in a number of other provincial markets. It would seem advisable, as a first step, to attempt to obtain more precise estimates of the level of self-help activity, preferably by provincial sub-markets. It would also be useful if this were done in a fashion which could also capture other useful household and dwelling information so that an effort can be made to

examine the determinants of self-help production. A proposed approach to this is discussed in Section 3.

If the significance of self-help production is confirmed, then there are a number of market issues which can be expected to arise. These are anticipated on the basis of what is currently known from Canadian case studies and international literature. This is that self-help production appears to react to different stimulae than industry production[1], but that employment and income generation by the self-help sector is probably not that different from the industry sector. These observations need to be examined in a more systematic fashion for Canada, and this should be a priority should self-help production prove to be significant. The implication is that current and new housing policies should be assessed for their implications for self-help production since a reduction in self-help would likely imply increased future social housing requirements.

The discussion so far has focused on the market considerations arising from self-help production. The following section considers some of the social housing opportunities associated with self-help.

2.2 SOCIAL HOUSING

Self-help housing offers policy opportunities which can be used to expand access to home ownership as part of the improvement of the housing conditions of Canadians. At this stage it appears unwise to generalise about self-help production, at least with the present state of knowledge. Thus **immediate policy should be cautious** in order not to disrupt current levels of self-help production, or to create difficulties for future policy initiatives.

As a base for future social housing policy it is first necessary to know the level of self-help production, and to be able to predict its location and characteristics (as with market housing). Given what is known about **self-help production it is unlikely to provide a response to some of the most difficult social housing problems** such as single parent households. However, if more can be learned about the self-help process, and particularly the barriers to self-help, then this initial observation might prove too pessimistic.

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[1] For example, because mortgage financing is less common for self-builders, then the self-build sector is less affected than industry production by interest rate changes.

As an example, it would appear from the PEI and Colchester County case studies that self-help is very difficult for unemployed households. It has been speculated that the reason for this is that income is necessary to obtain materials for the construction process. Policy initiatives could address this barrier to self-help production, and, if appropriately designed and delivered, could be a very effective social housing policy. The initiatives of the PEI Housing Corporation to increase the lending base of PEI credit unions is one of a number of possible approaches to this.

Self-help does offer considerable social housing potential in many other areas. For example, the elderly appear to use self-help as a strategy to obtain new housing[1], as do many lower income households. Similarly, self-help renovation is a strategy employed by most income groups as a means of improving aspects of their housing conditions. **Thus self-help also offers considerable potential for social housing policy through modification and improvement of the existing housing stock.**

It has usually been more difficult to deliver social housing in rural areas where recipients are easily identified and where the housing produced may be superior to the rest of the stock. However **because the household receiving assistance is actually seen to be making significant contributions of their own to the solution of their housing problem, self-help programs might be more acceptable in smaller communities than has sometimes been the case with more conventional programs.**

In many ways **the most important social housing policy in the short-run is to make sure that the market production through self-help continues ensuring that social housing requirements do not increase unnecessarily.** It is probably wise to avoid being too optimistic about the social housing potential of this category of self-help. Undoubtedly there are very useful contributions which can be made, however until more is known about the characteristics of self-help, and the barriers to its adoption by households with housing need, then policy initiatives should be cautious.

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[1] The elderly accounted for almost 10% of single detached starts in the PEI case study (Rowe 1983:53) and Bishop found that the over 55 age classes accounted for about 20% of starts (Bishop 1985:33). In addition, Jan McLean's work on the housing strategies of the elderly has also found self-help to be a frequently employed option (McLean, personal communication 1988).

2.3 OTHER CONSIDERATIONS

Self-help housing production is currently at very high levels in several markets and this creates a number of situations which require some consideration.

Potential planning problems appear to be associated with self-help, and these may be more difficult to regulate than for industry producers. Self-help production appears to site itself according to the availability of land and other locational characteristics which are not necessarily compatible with effective planning. For example, both ribbon and scattered sprawl development patterns are observable in areas with a high incidence of self-help production. This creates potential future planning and servicing problems which might prove to be expensive and difficult to address. However it is also difficult to plan self-help production because by its nature, it is more difficult to predict and more difficult politically to regulate.

There has been a tremendous increase in the availabilty of power tools and this has greatly facilitated self-help production with both new and existing dwellings. **However these technological developments may have created conditions which while making self-help production more accessible, may, at the same time, have increased health and safety risks**. If there is to be public encouragement for self-help, then these health and safety risks should be known in advance in order to ensure that policy initiatives do not increase the risk of personal accident.

Self-help production is currently unrecorded economic activity. **Increased attention on this activity might raise taxation issues which could be politically sensitive and which could have a negative impact on self-help production levels.** In the short-run this would increase public revenues but eventually it would probably also increase the requirement for public expenditures through increased social housing need. In addition, the political difficulties in attempting to tax the initiatives of households should not be underestimated, nor should the logistical difficulties in attempting to apply such a tax.

2.4 SELF-HELP RENOVATION AND REPAIR ISSUES

Statistics Canada appears to estimate self-help renovation and repair activities as 41% of total renovation and repair expenditures

(Zylstra 1988:13). The total value of such activities would thus be about $5.4 billion. While there might be doubts about the reliability of this estimate, it certainly does indicate that self-help activities in this area are very important.

My own feeling is that the Statistics Canada estimate could significantly underestimate total renovation and repair expenditures. The major cause of this would be unreported activities and it is very possible that most unreported activity would be self-help in nature. There are two types of unreported activity, deliberate and unintended.

Deliberate unreporting is not at all unusual and occurs with projects of all sizes. The principal reason is to avoid inspection and regulations which frequently mean higher costs, for example, the requirement to use 'ticketed' trades for electrical and plumbing work, or the higher life-safety codes for multiple units While it is known that this unreported activity occurs, it is not clear whether this provides lower cost accommodation. However if it does result in lower housing costs then **efforts to enforce existing regulations and codes could increase affordability problems by reducing the amount of self-help and associated cost savings**.

Unintended underreporting is very common, particularly in rural areas where there is no requirement to report, and also with small repair and renovation activities. When HUD conducted their survey of housing they found that this type of underreporting was quite significant, and in particular, that about 30% of individual expenditures on repair were less than $25 in value, and that the recall period for these expenditures was relatively short[1]. Thus **if a reliable estimate of total renovation and repair activity is to be sought, the issue of unintended underreporting must be carefully considered**.

Regardless of the validity of the Statistics Canada estimate all of the value reported is market renovation and repair. However very little is known about the process by which this occurs, or the quality of the work. The renovation and repair survey undertaken recently by the Evaluation Division recorded some potentially useful

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[1] I am unable to locate a copy of a report I completed on the design of a national renovation survey where citations were given for this source. The work at CMHC was for the Research Division.

information on this topic. However I don't know how far they have gone with the analysis of the survey results.

2.5 SUMMARY

Self-help production is currently known to be an imporant source of new housing in several markets and thus must be considered from the viewpoint of market housing as well as a sector which presents opportunities for social housing policies. The main issues from a market housing perspective are the necessity to identify the level of self-help output in different Canadian housing markets, and the need to obtain the data resources necessary for an examination of the characteristics and determinants of self-help housing production. Should the level of self-help prove to be significant but variable across markets, then consideration should be given to the impact of existing and new market housing policy initiatives, and of general economic policies, on self-help production. In order to assess this the employment and income multipliers for self-help housing should be determined. The objective of these market issues is to ensure that market housing policies and general economic policies do not inhibit self-help production as this would likely lead to increased social housing need.

Self-help housing presents some opportunities for social housing initiatives. However it is recommended that such initiatives be approached with considerable caution until more is known about this sector of production. General support policies such as information programs could usefully be adopted at an early stage, however more adventuresome initiatives should be based upon a more thorough understanding of the possibilities and limiting factors associated with self-help housing.

In addition there are a number of issues relating to health and safety, planning, and taxation which are associated with self-help production, and which require further analysis.

The following section describes the main sources of empirical information on self-help housing production in Canada which can be used to address some of these issues. Section 4 outlines some elements of a short and medium term research strategy which could address the remaining issues.

3.0 CURRENT DATA RESOURCES FOR SELF-HELP HOUSING PRODUCTION

It appears that self-help production might be more variable in its characteristics and determinants than is industry production. If this is indeed true, then direct information on Canadian markets is required for the consideration of possible policy initiatives. To date, the author knows of four sources of information on self-help production in Canadian markets.

The first of these is the Prince Edward Residential Financing and Construction Survey. This was based on interviews with the first occupants of over 10% of new single-detached dwellings started between 1978 and 1981 in PEI and is reported in Rowe (1983). This survey was funded by an External Research Grant and showed that about 83% of new singles in PEI were self-help produced. The data from that survey includes considerable detail on household characteristics, financing, and the construction process, as well as respondent's experiences with lenders, contractors and government. The data was delivered to CMHC in 1985 when documentation was also provided. While the PEI study should only be treated as a case study, it does present the means by which a number of the issues raised above can be reviewed. This would not be a substitute for a much wider survey, however it would be very useful as part of the planning of such a study.

The second important source is a case study in Colchester County, Nova Scotia. This applied a similar methodology to the PEI study and was conducted by Mary Bishop as a Master's thesis funded by the CMHC Scholarship program. Bishop found slightly higher levels of self-help in Colchester County (91%). Her study also revealed a number of differences between the Colchester County market and the PEI market including the means of financing of construction and a number of household characteristics. Her data contains most of the same variables as the PEI data and has recently been computerised at NORDCO.

A third case study was conducted in two counties in Ontario; Portland and Kingston Counties, both of which are near Kingston. This was part of a Master's degree in planning for Carl Fuoco. The two counties exhibit very different levels of self-building and the data from that thesis, if available, could prove interesting. The thesis was funded by the CMHC Scholarship program.

The fourth source of data is a survey of Atlantic Canadian households in communities with populations less than 20,000. This was conducted by the Rural and Small Town Research and Study Program at Mt. Allison University. The program is funded by CMHC. The survey methodoloy is reported in Stropie (1987) and the data has kindly been provided by the program to the author of this report for research purposes. The survey included a question on the method of construction of the dwelling and includes 1,840 completed instruments (65% success rate). The survey also contains a number of items detailing household and dwelling characteristics, along with considerable information about household perceptions about their community.

With an algorithm created by the author it is possible to show that about 85% of 1980-85 single detached starts in Atlantic Canadian communities with population less than 20,000, were self-help produced. Self-help production is highest in Newfoundland and lowest in Nova Scotia, but is above 80% of new singles in all provinces. This data appears to offer some potential for comparing self-help production among Atlantic markets.

There are also a number of anecdotal sources for other locations in Canada. These are reported in Rowe (1988) and Rowe (forthcoming:Chapter 3) and they indicate that there is considerable self-help production in urban areas of Atlantic Canada, in Saskatoon, and in rural subdivisions in BC. Moreover Rowe (1988) uses residual financing as an indicator of relative levels of self-help production and concludes that it is important in Saskatchewan, British Columbia and Quebec, as well as Atlantic Canada.

The two case studies in the Maritime Provinces can be used to examine self-help production in considerable detail, while the Mt. Allison survey data can be used to generate provincial estimates for this activity in Atlantic Canada. In addition, there is always the possibility of returning to the Maritime case studies to evaluate the self-help experience and the quality of self-help accommodation. The understanding of self-help production in Atlantic markets is much more advanced in comparison to other Canadian markets, and the resources are available to increase our knowledge of the Atlantic markets.

Renovation and repair data which identifies self-help activities are rare; however, the Program Evaluation Division of CMHC did include questions which attempted to identify self-help in their recent

survey of renovation activities. I have not reviewed the data nor have I yet read the reports from the evaluation and thus cannot comment on the utility of the data. I do recall having concerns whether it would indeed be possible to identify self-help activity from the questions of the survey: however, these concerns may well have been ill-advised, or they may have been successfully addressed by the Evaluation Division. This data could be a very useful and unique opportunity to begin to better understand the role of self-help activities in renovation and repair.

4.0 SUGGESTIONS FOR RESEARCH PRIORITIES

The strongest priority is to determine the level of self-help production outside Atlantic Canada. There are a number of means for this, however the easiest is probably the addition of one question to the Household Facilities and Equipment Survey (HFE) which is appended to the Labor Force Survey. If the additional question could determine the sector of production for new dwellings then first occupants can be identified with the equality of the age of the dwelling and the duration of occupancy variables which are usually captured in the HFE survey. With suitable deletions for inherited dwellings and so on, recently constructed dwellings occupied by the first occupants can be used to generate estimates of the level of self-help in new construction.

A similar procedure is possible for renovation and repair estimates, however this is likely to present more difficulties and the estimates will likely be less reliable. Whereas new construction is relatively homogeneous, renovation and repairs are very hetrogeneous. This reduces the reliability of renovation and repair estimates.

If the suggestion of the Household Facilities Survey is adopted for the provision of sectoral estimates, then the accompanying data in the HIFE database will provide a very powerful resource for an examination of the characteristics and determinants of self-help. The sample size of the HIFE database is such that this analysis can be pursued for all provinces except PEI at the urban and rural level, and in even greater detail in the larger provinces. It is worth noting that this would represent the best data on self-building available anywhere, and that since the HIFE database is usually semi-annual, that sectoral trends could be monitored.

Because the HFE survey provides such an efficient and cost-effective option, other alternatives will not be explored in the present report. Rather, suggestions are made for a fuller utilisation of existing resources in anticipation of a positive decision on the HFE option.

The Mt. Allison database can be used to provisionally validate possible algorithms for identifying production sectors. This is a useful exercise which could be part of the development of the HFE item. Further analysis of the Mt. Allison data would also be useful to examine possible provincial differences amoung self-helpers in Atlantic Canada. Appendix 1 presents a list of variable labels from the Mt. Allison data which might be of interest.

There are also a number of areas which remain unexplored in the PEI and Colchester County case studies. For example, the information captured on attempts by respondents to obtain public assistance, and their views of what was and should have been available was not systematically reviewed in either study report. In addition, there has not been an effort to determine what proportion of self-help households might have had housing needs prior to obtaining their own housing. Households who might have had affordability problems could be identified as an initial step in this process. Also, since there are a number of elders in the PEI and Colchester County case studies, an evaluation of the self-help strategy for the elderly can be attempted. There are, of course, a number of other questions which could be pursued with the data from the two case studies and the Mt. Allison survey.

There is a further area where case studies offer useful opportunities for achieving a better understanding of the self-help process. For both the PEI and Colchester County surveys, the names and addresses of respondents have been retained by the principal researchers. In addition, for PEI, the land registration system is organised in a fashion which will permit tracking of changes in occupancy and value of the dwellings in the original survey, and additional new dwellings built by any of the respondents. The system will also provide most recent addresses for respondents still resident in PEI. This means that a follow-up survey is a possibility for the PEI case study.

A follow-up survey would offer the opportunity to examine a number of questions about self-help, the most interesting of which is the possibility of obtaining a comparison of the current positions of

self-help and industry households five years after the original survey. In addition, it would offer the opportunity to obtain the views of the households on a number of policy options and to have them reflect on the whole process, particularly with respect to problems they had and the type of assistance which would have facilitated the process.

5.0 SUMMARY AND RECOMMENDATIONS

It is only recently that an appreciation has developed of the importance of self-help housing to overall housing provision. It is now known to be a major source of new housing production in the Atlantic region, and is predicted to be an imporant source in other provincial markets as well.

Self-help housing production should initially be viewed as market housing providing new accommodation and improvements in existing housing to a wide variety of households. Without the opportunity to address their own housing needs through self-help, many of these households would find themselves unable to obtain adequate, suitable and affordable housing, and the level of social housing need would thus increase. Because the factors which influence self-help production are only beginning to be understood there is a danger that housing initiatives, or fiscal and monetary policies, might negatively impact self-help production. It is thus imporant that the extent of self-help production, and the factors which influence this sector are better understood. Otherwise there will always be the risk that social housing requirements could increase inadvertently by restricting self-help production.

At the same time, if more were known about the barriers to self-help production, then there are opportunities for market and social housing initiatives which have the potential to be more cost effective, and perhaps more socially acceptable then more traditional initiatives.

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APPENDIX 1

LISTING OF POTENTIALLY USEFUL VARIABLES IN THE MT. ALLISON UNIVERSITY SURVEY DATA SET

Variable Name	Variable Label
var 002	Province
var 004	Community size
var 005	Length of residence
var 007	Most like to live
var 008-10	Factors affecting residence choice
var 011-014	Local facilities
var 015-024	Distance to services
var 025	Tenure
var 026-029	Accommodation costs
var 030-31	Dwelling type
var 032	Length of occupancy
var 033	Age of building
var 033-037	Facilities and equipment
var 038	How home acquired/built
var 039-41	Financing
var 042-43	Land
var 121-173	Household characteristics